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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/797,901	03/10/2004	Fred A. Brown	917/198	3383
2101	7590	08/15/2005		
BROMBERG & SUNSTEIN LLP 125 SUMMER STREET BOSTON, MA 02110-1618			EXAMINER LAM, THANH	
			ART UNIT 2834	PAPER NUMBER

DATE MAILED: 08/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/797,901	BROWN, FRED A.	
	Examiner	Art Unit	
	Thanh Lam	2834	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 6/24/05 have been fully considered but they are not persuasive.

Applicant's argument on the ground that the cited prior art Leuthold shows a motor assembly having "a steel ball 160 fixed to the end of shaft 20 and resting against an elastic shield 162 . . ." (emphasis added and change made in brackets, see column 8, lines 5-7). In other words, in contrast to the explicit requirements of Claim 1, the ball 160 is not movable relative to the shaft 20.

The examiner submit that the arguments is not persuasive because the "a steel ball 160 fixed to the end of shaft 20 and resting against an elastic shield 162 . . ." are at assembly stage (non-operating stage). At an operation stage, the shaft is rotating (paragraph 5, lines 6-7) and driving the ball 160 to move relatively and radially with the shaft. The evidence shown that the steel ball 160 fixed to the end of shaft 20 (emphasis above) when the shaft is rotated then, it is impossible for the ball to stay (not moving). Therefore, the cited ball (160) read on the limitation "a movable support member being movable relative to the shaft" as recited in claims 1, 12, and 20.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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2. Claims 1-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Leuthold et al. (US 5,710,678).

Regarding claims 1, 20, Leuthold et al. disclose a motor comprising: a stator (50); a rotor having a shaft (20); a sleeve bearing (80) in contact with the rotor shaft, the sleeve bearing being fixedly secured to the stator; and a movable support member (160) axially supporting the shaft, the movable support member being movable relative to the shaft.

Regarding claims 2,13, Leuthold et al. disclose a housing at least in part encasing the stator, the housing forming a recess (where the ball 160 seat)for supporting the movable support member.

Regarding claims 3,17, Leuthold et al. disclose the movable support member is a spherical member.

Regarding claims 4,21, Leuthold et al. disclose the spherical member is a ball bearing.

Regarding claims 5, Leuthold et al. disclose the recess has a depth less than a radius (best shown in fig. 2A) of the spherical member.

Regarding claim 6, Leuthold et al. disclose a retaining washer about the shaft.

Regarding claims 7, Leuthold et al. disclose the shaft has a lower end, the retaining washer being located between the lower end of the shaft and the sleeve bearing.

Regarding claims 8, 23, Leuthold et al. disclose a rotor hub (22) coupled to the

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shaft, the rotor hub being spaced from the sleeve bearing.

Regarding claims 9, 16,24, Leuthold et al. disclose the rotor includes a rotor magnet (60), the rotor magnet being oriented with the stator to bias the rotor toward the movable support member.

Regarding claims 10, Leuthold et al. disclose the movable support member contacts the shaft when the motor is right side up and when the motor is upside down.

Regarding claims 11,19, 25, Leuthold et al. disclose the center of gravity of the rotor coincides with an opening in the sleeve bearing that accommodates the shaft.

Regarding claims 12, Leuthold et al. disclose a motor comprising: a stator; a rotor having a shaft that is rotatably coupled with the stator; and a movable support member (160) supporting the weight of the rotor, the movable support member being movable relative to the shaft.

Regarding claims 14, Leuthold et al. disclose a sleeve bearing rotatably coupled with the shaft.

Regarding claims 15, Leuthold et al. disclose the rotor includes blades for moving air.

Regarding claims 18, Leuthold et al. disclose the stator has DC commutation circuitry.

Regarding claims 22, Leuthold et al. disclose a housing encasing the stator, the housing forming a recess for supporting the movable means for axially supporting.

Conclusion

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh Lam whose telephone number is (571) 272-2026. The examiner can normally be reached on t-f 9-7.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren E. Schuberg can be reached on (571) 272-2044. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Thanh Lam
Primary Examiner
Art Unit 2834
